

17

3. A method as in claim 1, wherein said calibration circuit facilitates:

identifying a first voltage range in said first plane; and
identifying a second voltage range in said second plane.

4. A method as in claim 3, wherein said identified ranges are used with at least one of said measured potentials in order to identify a position of a mechanical interaction.

5. A method as in claim 1, wherein a calibration signal developed as a result of current flowing through said calibration circuit, is monitored to identify the onset of conduction between said first and second planes as a result of a mechanical interaction.

6. A method as in claim 1, including:

switching said route of current flow in response to an analysis of sensor conditions.

7. A method as in claim 1, wherein said first plane has a first and second connection point and said second plane is connectable at third and fourth connection points, further including:

supplying said constant current to said first plane at said first connection point;

sinking said constant current from said second plane at said fourth connection point;

measuring a potential in said sensor;

swapping said first and second connection, and swapping said third and fourth connections;

repeating the measurement of said potential in said sensor; and

combining said repeated measurements to determine a characteristic of mechanical interaction in said sensor.

8. In a sensor comprising a first outer plane through which a substantially constant current flows to develop a first potential; an inner plane, which, in combination with said first outer plane, has been constructed substantially to respond to the force area product of mechanical interactions; a second outer plane, through which said constant current also flows to develop a second potential, which, in combination with said inner plane, has been constructed substantially to respond to the area of mechanical interactions; and calibration means, a method of detecting an indication of applied force of a mechanical interaction, said method comprising:

measuring a third potential developed between said first outer plane and said inner plane;

measuring a fourth potential between said inner plane and said second outer plane;

processing said third potential with said fourth potential to identify an indication of the force of mechanical interactions; and

conducting said constant current by an alternative route to that used during position detection via said calibration

18

means so as to calibrate the voltage ranges across said first outer plane and said second outer plane.

9. A method as in claim 8, further comprising:

processing said first potential to identify a first co-ordinate of said mechanical interaction; and

processing said second potential to identify a second co-ordinate of said mechanical interaction.

10. A position detector constructed from fabric comprising:

at first conductive plane and a second conductive plane; processing means configured to conduct a substantially constant electric current through said first and second planes to identify the position of a mechanical interaction; and

calibration means configured to conduct said constant current by an alternative route to that used during position measurement so as to calibrate the voltage range across said first conductive plane and said second conductive plane.

11. A position detector as in claim 10, wherein said detector is configured so as to measure the voltage between said planes in order to determine an additional characteristic of said mechanical interaction.

12. A position detector as in claim 10, wherein said calibration means facilitates steps of:

identifying a first voltage range in said first plane; and

identifying a second voltage range in said second plane.

13. A position detector as in claim 12, wherein said processing means is arranged to process said identified ranges with representations of voltages developed in said fabric sensor while said calibration means is inactive.

14. A position detector as in claim 10, wherein said processing means is arranged to monitor voltages developed during calibration, thereby to identify:

the onset of conduction between said first and second planes.

15. A position detector as in claim 10, wherein said processing means is configured to switch said route of said current flow in response to an analysis of sensor conditions.

16. A position detector as in claim 10, wherein said first plane has a first and second connection point and said second plane is connectable at third and fourth connection points, further including switching means controllable to:

supply said constant current to said first plane at said first connection point;

sink said constant current from said second plane at said fourth connection point; and

swap said first and second connection, and, swap said third and fourth connections.

* * * * *